

WHAT IS CLAIMED IS:

1. A search and rescue beacon comprising a main transmitter transmitting a Cospas-Sarsat signal at a main frequency and an auxiliary homing transmitter transmitting a homing signal at a homing frequency close to said main frequency.
2. The beacon of claim 1 wherein both said Cospas-Sarsat signal and said homing signal are generated by a single synthesizer switching between a main Cospas-Sarsat burst transmission and a continuous homing frequency transmission of said homing signal.
3. The beacon of claim 1 wherein said main frequency is within the 406-406.1 MHz band.
4. The beacon of claim 2 wherein said main frequency is within the 406-406.1 MHz band.
5. The beacon of claim 3 wherein said homing frequency is dedicated in a lower part of a 406 - 406.1 MHz frequency band.
6. The beacon of claim 3 wherein said homing frequency is dedicated in an upper part of a 406 - 406.1 MHz frequency band.
7. The beacon of claim 4 wherein said homing frequency is dedicated in a lower part of a 406 - 406.1 MHz frequency band.
8. The beacon of claim 4 wherein said homing frequency is dedicated in an upper part of a 406 - 406.1 MHz frequency band.
9. The beacon of claim 2 wherein said single synthesizer uses a single amplifier chain.

10. The beacon of claim 9 wherein said single synthesizer and amplifier chain use a single antenna.
11. The beacon of claim 1 wherein said homing signal is transmitted at a lower power than said Cospas-Sarsat signal.
12. The beacon of claim 11 wherein said homing signal is transmitted at approximately 50 milli-watts.
13. The beacon of claim 2 wherein said homing signal is transmitted at a lower power than said Cospas-Sarsat signal.
14. The beacon of claim 13 wherein said homing signal is transmitted at approximately 50 milli-watts.